

# RAMAN RESEARCH INSTITUTE

## Announcement of opportunity for experimental research in Quantum Communications

**Raman Research Institute** invites applications from individuals for Project Associate positions. The candidates must possess excellent and consistent academic record and core competence and research aptitude in Physics, especially in the areas of Quantum Physics and Optics.

The Quantum Information and Computing (QuIC) lab of RRI is working on an ambitious project on “**Long Distance Quantum Communications: Repeater and Relay technologies**” under the Quantum Enabled Science and Technology Programme of the Department of Science and Technology, Govt of India (<http://210.212.36.85/guest/People/urbasi.html>). This involves collaborations with Prof. Arun Pati, Prof. Ujjwal Sen, Prof. Aditi Sen De (HRI), Prof. Prasanta Panigrahi (IISER Kolkata) and Prof. Indranil Chakrabarty (IIIT Hyderabad).

The selected students will work on experiments at RRI under this umbrella and will be based in Bangalore.

We are currently looking for two **Project Associates** appointments within the QuIC lab, Light and Matter Physics group of the Institute. The candidate will be initially hired as Project Associate I position for the first three years, successful completion of which will lead to a Project Associate II position in the remaining years. The initial position will be for a period of one year with possible extension. The yearly extension will be based on annual performance review which will be conducted at RRI. Motivated candidates who wish to pursue a PhD degree are especially encouraged to apply. This project can lead to the award of a PhD degree from collaborator institute (IIIT Hyderabad) on fulfilment of performance criteria.

Candidates who have qualified National Eligibility Tests- CSIR-UGC NET including lecturership, GATE or national eligibility examinations conducted by Central Government departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER etc. are eligible for the designation of Junior Research Fellow (JRF) in the first three years and Senior Research Fellow (SRF) in the remaining years.

**Remuneration: Project Associate I – Rs. 31,000/- + 27% HRA**  
**Project Associate II – Rs. 35,000/- + 27% HRA**

### **Eligibility:**

**Age:** Not more than 28 Years as on the closing date for receiving the completed application forms online. Age relaxation may be considered for candidates with relevant research experience.

### **Essential:**

Masters' degree (Physics/ Engineering Physics/ Photonics). Candidates who have appeared for the final exam and are waiting for their final results are also eligible to apply.

### **Desirable:**

The candidate should be motivated and should have a flair for experimental work as well as programming skills. 75% or more marks in aggregate or equivalent CGPA in the qualifying course is desirable.

The candidate should have experience in one or more of the following –

1. Prior experience of working in an optics based lab environment and familiarity with practical handling of optical and opto-mechanical components.
2. Knowledge in controlling of equipment using Labview.
3. Previous work experience in quantum information/ quantum communication based research work and familiarity with basic concepts in the field through course work, online classes etc.
4. Programming knowledge in Matlab/ Mathematica/ C++/ Python.

### **Selection procedure:**

Candidates who qualify in the required criteria will be called for an interview. The interviews will be held online.

Applications may be sent to [quic-job@rri.res.in](mailto:quic-job@rri.res.in). The application should consist of the candidate's CV with academic qualifications details, work experience details as well as a statement on fulfilment of essential and desirable (if applicable) criteria.

**Closing date for receiving the applications: 25<sup>th</sup> October 2021**

**Applications received after the last date will not be considered.**

### **General Information:**

- Those who are already working in Government/Semi Government/PSU/Autonomous Bodies shall submit their applications through proper channel.
- The Institute reserves the right to restrict the number of candidates for interview to a reasonable limit, on the basis of qualification and experience higher than the minimum prescribed in the advertisement. Mere fulfilling the essential and desired qualifications will not entitle an applicant to be called for interview.
- Age relaxation will be applicable as per Govt., of India rules for the candidates belonging to SC/ST/OBC/Persons with disabilities categories.
- Second Class train fare for attending interview shall be reimbursed to the candidate on provision of original tickets.
- The institute reserves the right to relax any of the above requirements in exceptional cases.
- The Institute reserves the right not to fill the posts herein advertised. Canvassing in any form shall disqualify the candidate.